

# REMARKS

Claims 1-46 were pending in the application. Claims 1-41 were elected. Claims 11-17 were allowed and claims 8, 9, 21-25, 29-33, and 37-41 were indicated as allowable if written in independent form. Applicants wish to thank the Examiner for indicating allowable subject matter; but traverse the rejections of record for the reasons set out below.

Claims 1-46 have been canceled without prejudice and replaced with new claims 70-110. It should be noted that on February 19, 2003 the Applicants submitted, via Express Mail, a Preliminary Amendment which confirmed the February 5, 2003 telephonic election of the Group I claims. That Preliminary Amendment also added claims 47-69, similarly drawn to the elected invention. That Preliminary Amendment was not entered as of March 31, 2003, the date of the action to which this response is directed.

It is respectfully submitted that the Preliminary Amendment should have been entered and the claims contained therein (claims 47-69) were entitled to examination in the March 31, 2003 action, mailed some six and a half weeks after claims

47-69 were submitted. Attempts to reach the Examiner to determine the status of claims 47-69 have been unsuccessful.

Claims 47-69 will be further addressed herein along with newly submitted claims 70-110

In view of claims 47-69 having previously been submitted for examination, this amendment adds claims starting with number 70. New claims 70, 80, 87, 95, and 103 are independent. Neither the total number of claims nor the number of independent claims is increased by this amendment.

New independent claim 70 is similar in scope to original claim 1 but clearly specifies that the "mounting base subsystem protects and includes therein electronic circuits for electronically accessing said memory subsystem" [emphasis added]. Claim 1 was rejected as obvious over Purdom ('925), hereinafter "Purdom", in view of Wright.

The Examiner asserts that Purdom discloses "a mounting base subsystem 101 removably coupled to said memory subsystem". This is incorrect. It is a stretch of the imagination to equate Purdom's cover 101 to Applicant's "mounting base". Purdom never discusses issues of mounting and it is pure speculation as to

how the Purdom device is mounted, if mounted at all. The term "mounting base" is well defined in the instant application. See, e.g., paragraphs 40, 47 and the Abstract of the published application.

The Examiner also asserts that Purdom discloses "electronic circuits 113 for electronically accessing said memory subsystem." Purdom's reference to 113 is a cable, not circuits as that term is understood from the instant disclosure and commonly used by those skilled in the art. The Examiner is reminded that the Applicants are permitted to define claim terms and that the Applicants' definition of a claim term is controlling. See, e.g., Figures 9 and 10, paragraphs 47, 48, 51 etc.

Moreover, claim 70 distinctly claims and particularly points out that the mounting base subsystem "protects and includes" the electronic circuits. This clearly distinguishes from Purdom's cover 101 which does not include therein (in the cover) any electronic circuits.

Finally, with respect to the Wright patent, it is observed that Wright was cited (against original claim 1) for teaching ETHERNET connectivity. This is no longer relevant in

the context of new claim 70 which does not include an ETHERNET limitation.

For all of the aforementioned reasons, new claim 70 is clearly distinguishable from the art of record which, individually or in combination, completely fail to teach, claim or even suggest Applicants claimed hardened voyage recorder, including the mounting base subsystem as defined in claim 70.

Accordingly, claim 70 is believed to be in condition for allowance.

Claims 71-79, depending from claim 70, are similarly believed to be allowable based on the same reasoning set forth hereinabove with respect to claim 70. This dependency alone supports patentability. But further, it should be noted that the cited Wright patent is directed to a flight recorder; not a hardened voyage recorder as taught and claimed by Applicants.

This fact, taken together with the limitations in each and every remaining claim that refers to ETHERNET connectivity, make the purported combination of Wright with Purdom inadequate to support a rejection under 35 U.S.C. 103. Such combination simply would not be a hardened voyage recorder, as defined and

taught by Applicants; nor are other limitations incorporated into the parent claim 70, upon which all ETHERNET oriented claims ultimately depend, e.g., limitations directed to the mounting base subsystem, etc., taught in either of the cited references or any combination thereof.

Accordingly, it is respectfully submitted that claims 71-79 are in condition for allowance.

Claim 80 corresponds to former claim 11. Former claims 11-17 were indicated as being allowable. Claim 80 is slightly broader than claim 11. Claim 80 does not specify that the quick release clamp need be a V-clamp. Those skilled in the art will appreciate that other types of quick release clamps could be used and that limiting the claim to a V-type clamp is unnecessary. See, for example paragraphs 19 and 40 of the published application. It is therefore believed that claims 80-86 are allowable for the same reasons that claims 11-17 were indicated as allowable.

Claim 87 is similar to original claim 18 but includes the limitation that the "mounting base subsystem is adapted to be mounted on the exterior of a marine vessel." Support for

this limitation can be found in paragraph 9 of the instant specification.

Original claim 18 was rejected as anticipated by Purdom ('925). It should be noted that both Purdom references and the instant application are co-owned by L3 Communications. The Purdom ('925) reference concerns a flight recorder. The present invention is a voyage recorder, i.e. for use on a marine vessel. The design requirements for a voyage recorder are very different from those of a flight recorder. These differences are discussed at length in the background section of the instant application. One of the requirements of a voyage recorder is that it be mounted on the exterior of a marine vessel. This feature has been included in new claim 87. The Examiner should consider all that is implied by the requirement that it be mounted on the exterior of a marine vessel. For example, it must be able to withstand prolonged exposure to salt air and water, something which a flight recorder is not designed for.

In addition, it is submitted that the Purdom does not teach or suggest the claimed mounting base subsystem of claim 87. The Examiner has stated that the "crash housing cover 101" of Purdom is the same as the claimed mounting base subsystem of the present invention. In fact, Purdom does not indicate that

the cover 101 is a mounting base or that it is used for mounting. Furthermore, Purdom does not teach or suggest anything about mounting the unit. See the discussion of claim 70, above, where the "mounting" limitation is discussed. Thus for all the reasons set forth hereinabove, the mounting base subsystem as set forth in claim 87, is clearly distinguishable over Purdom.

Accordingly, claim 87 is believed to be in condition for allowance.

Claim 88 corresponds to former claim 19 which was also rejected as anticipated by Purdom ('925). This claim specifies that the "mounting base subsystem includes at least one watertight cable connector." The Examiner has stated that the "cable 113" in Purdom is the same as the claimed watertight cable connector. This statement ignores two thirds of the claim element. First, a cable is not the same as a cable connector. Second, there is nothing in Purdom which suggests a watertight characteristic of the cable 113. To the contrary, Purdom teaches that steam escapes from the boiler through the cable path. If steam can pass through this path, it is NOT watertight.

Accordingly, claim 88, which depends from and includes all the limitations of claim 87, is believed to be in condition for allowance.

Claim 89 corresponds to former claim 20 which was also rejected as anticipated by Purdom ('925). This claim specifies that the "mounting base subsystem includes a first watertight cable connector for coupling with a power supply and a second cable connector for coupling with a data source." As explained above, Purdom does not disclose a single watertight cable connector. The fact that Purdom might imply connection to a power source and a data source is far from teaching two watertight connectors.

Accordingly, claim 89, which depends from and includes all the limitations of claim 87, is believed to be in condition for allowance.

New claim 90 corresponds to former allowed claim 21 but is slightly broader. The difference is that the new claim does not specify that the quick release clamp be a V-clamp. As discussed above with reference to claims 77 and 78, this change in the claim language should not affect the patentability of the



claim since the novel quick release feature is present in all claims of this type.

Accordingly, claim 90, which depends from and includes all the limitations of claim 87, is believed to be in condition for allowance.

Claims 91-94 depend from claim 90 and are allowable for the same reasons.

Claim 95 corresponds to former claim 26 which was rejected as obvious over Purdom ('925) in view of Lemke et al.

Claim 95 calls for "at least one memory interface converter chip coupled to said removable memory subsystem". The term "memory interface converter chip" is defined in the application. See paragraph 53 of the published application:

"Accordingly, the circuits in the subassembly 14 include one or more MICs (memory interface converter chips) needed to interface (convert between) parallel communications which BGA chips employ and the serial communications path with processor. The MICs need to be able to drive the large number of BGA chips distributed in the preferred stacked memory. The MICs may be located on the circuit board 1101 shown in FIG. 11a (MIC chips 1102 and 1103) and/or may be distributed among the memory circuit boards shown in FIG. 11a. The processor communicates with the MICs to address memory and the MICs determine which board or stack contains the addressed memory."

The Examiner has stated that the "A/D conversion" spoken of by Lemke at col. 15, lines 8-30 is the same as the claimed MIC. Clearly this is not the case. An Analog/Digital converter is not anything like a Serial/Parallel converter.

Accordingly, for the reasons set forth hereinabove, claim 95 is believed to be allowable.

Claim 96 corresponds to former claim 27 which was also rejected as obvious over Purdom ('925) in view of Lemke et al. Since claim 96 depends from claim 95, the arguments made above regarding claim 95 apply to this claim as well.

In addition claim 96 specifies the watertight cable connector discussed previously. The Examiner again relies on the cable 113 of Purdom to meet this limitation. As previously discussed above, this is improper.

For all the reasons set forth hereinabove, claim 96 is believed to be in condition for allowance.

Claim 97 corresponds to former claim 28 which was also rejected as obvious over Purdom ('925) in view of Lemke et al. Claim 97 depends from claim 95 and specifies two watertight

cable connectors. Claim 97 is therefore allowable for the reasons discussed above.

Claim 98 corresponds to former allowed claim 29 but slightly broader. This claim concerns the quick release clamp discussed above and is believed to be allowable.

Dependent claims 99-102, all ultimately dependent on claim 98, are similarly believed to be allowable.

Claim 103 corresponds to former claim 34 which was rejected as obvious over Purdom ('925) in view of Purdom et al. ('631).

Claim 103 is directed to a "hardened voyage data recorder" and includes the previously discussed "memory interface chips" as well as a "stacked memory" and a "mounting base subsystem".

The Examiner has stated that Purdom ('925) discloses all of this claim but for the stacked memory and the memory interface chips. According to the Examiner, Purdom et al. ('631) teaches the stacked memory and the memory interface chips.

As discussed above, neither of the Purdom references concerns a voyage recorder. Both concern flight recorders. The fact that this limitation is in the preamble of the claim does not permit the Examiner to ignore it. The Federal Circuit explained in In re Stencel, 4 U.S.P.Q.2d 1071 (Fed. Cir. 1987), that whether a preamble of intended purpose constitutes a limitation is a matter to be determined on the facts of each case. The court essentially reasoned that where the purpose stated in the preamble supplies the incentive to combine the prior art and that incentive was not known in the art, the preamble may be considered a limitation because it gives life and meaning to the function of the claimed structure. 4 U.S.P.Q.2d at 1073. Since neither of the cited references mentions "hardened voyage recorder", that purpose is not known in the prior art and should be considered a limitation of the claim.

Furthermore, the Examiner states that Purdom ('953) discloses the claimed memory interface chips but does not point out where this can be found. With the foregoing discussion of the claimed MIC in mind, it is submitted that Purdom ('953) never mentions the words "interface", "convert", or "serial";

let alone Applicants' claimed plurality of MIC chips (claim 103).

For all of the reasons set forth hereinabove, claim 103 is believed to be in condition for allowance.

Claim 104 depends from claim 103 and further specifies the "watertight cable connector" discussed above with respect to Purdom ('925). It is submitted that Purdom ('953) never discusses anything being watertight. Thus claim 104 is believed to be in condition for allowance.

Claim 105 depends from claim 103 and specifies two watertight cable connectors. Thus, claim 105 is similarly believed to allowable, based on the same reasons set forth hereinabove.

Claim 106 depends from claim 103 and is also allowable because it contains the quick release feature previously indicated as allowable by the Examiner.

Further, claims 107-110 depend from claim 106 and are allowable for the reasons set forth hereinabove with respect to

claim 106 and to claim 103, on which claims 107-110 ultimately depend.

As mentioned above, the status of claims 47-69 is unknown. Therefore, the Applicants will take this opportunity to point out for the Examiner why these claims are allowable over the art of record. Claims 47 is the only independent claim and claims 48-69 depend directly or indirectly from claim 47.

Claim 47 is directed to a "hardened voyage recorder for use on a marine vessel". It includes some of the limitations discussed above as well as additional limitations. For example, the first element of claim 47 is: "a first module including a mountable base mountable on the marine vessel and containing electronics for receiving data from data sensors located on the marine vessel and for writing data to a memory module". These limitations have been discussed above.

None of the cited art teaches a base portion mountable on a marine vessel and none teach a base portion containing electronics. For these reasons alone, claims 47-69 are believed to be in condition for allowance and should be indicated as allowable.

Applicants respectfully requests consideration of  
claims 47-110 now pending; and solicits the allowance of these  
claims at an early date.

RESPECTFULLY SUBMITTED,

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